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10/651,684	08/29/2003	David C. Boyden	SON5180.26A	2757

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EXAMINER

HANNIF ALI, LARRY

ART UNIT PAPER NUMBER

2688

DATE MAILED: 10/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/651,684

Applicant(s)

BOYDEN ET AL.

Examiner

Larry Hannif-Ali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 21-31 is/are rejected.
- 7) ☐ Claim(s) 19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8-29-05 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/25/05, 8/29/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1, 5, 6, 7, 12, 18, and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Logvinov (U.S. Pub. No. 2004/0160990 A1) in view of Santhoff (U. S. Pub. No. 2004/0022304 A1).

Regarding **Claim 1**, Logvinov teaches an apparatus for communicating data content to a remote device [paragraph 0009 (Logvinov discloses a point to multipoint PLC data signal transmission system... transmitted over the power line network between a head-end PLC transceiver and a plurality of remote PLC transceivers) & Fig 1, Items 12, 14A, and 14N], comprising: a power-line communication (PLC) module [paragraph 0036, lines 38-41 & Figs 3 and 4] configured for connection to a power line [paragraph 0023, lines 4-5 & Figs 3 and 4, Item 16]; a PLC receiver associated with said PLC module [paragraph 0024, lines 1-2 & Fig 1, Item 26]; said PLC receiver configured to receive data content from a content server over a PLC network [paragraph 0023, lines 4-5 & paragraph 0025, lines 4-9 & Fig 1, Item 18 & paragraph 0025, lines 4-9 & Fig 1, Item 12 (inherently, the head end (server) provides broadband communications)]. Logvinov teaches a PLC transceiver associated with PLC module and configured to transmit data content received by the PLC transceiver for receipt by PLC remote devices. However, Logvinov fails to specifically teach an ultra-wide band

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(UWB) wireless transmitter associated with said PLC module; said UWB wireless transmitter configured to transmit data content received by said PLC receiver for receipt by a UWB wireless receiver associated with a remote device. The examiner maintains that the claimed limitation was well known in the art as taught by Santhoff.

In the same field of endeavor, Santhoff discloses an ultra-wideband communication system through local power lines including an ultra-wide band (UWB) wireless transmitter associated with said PLC module; said UWB wireless transmitter configured to transmit data content received by said PLC receiver for receipt by an UWB wireless receiver associated with a remote device [paragraph 0089, lines 17-19 & Fig 6, Item 302 & paragraph 0093 & Fig 7, Item 401].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the system of Logvinov, including the PLC module, power line, and PLC receiver together with the ultra-wideband wireless transmitter and transceiver as taught by Santhoff in order to have a compound system with the capabilities of wired and wireless communication associated with each remote device.

Regarding **Claim 5**. The combination of Logvinov and Santhoff further teaches the apparatus a PLC transmitter coupled to said PLC receiver [Logvinov: paragraph 0024, lines 1-2 & Fig 1, Item 20]; said PLC transmitter configured to enable two-way communication over said PLC network [Logvinov: paragraph 0009, lines 5-10]; and a UWB wireless receiver coupled to said UWB wireless transmitter and configured for receiving data content from a remote device having a UWB wireless transmitter [Santhoff: paragraph 0089, lines 17-20 & paragraph 0092, lines 1-3 & paragraph 0093, lines 4-6]; whereby data content can be received from the remote device and communicated over said PLC network to the content server [Logvinov: paragraph 0023, lines 4-12].

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Regarding **Claim 6**. The combination of Logvinov and Santhoff further teaches wherein said PLC transmitter is configured to encode its unit address when transmitting requests over said PLC network [Logvinov: paragraph 0011 & paragraph 0024, lines 1-5]

Regarding **Claim 7**. The combination of Logvinov and Santhoff further teaches the apparatus further comprising means for communicating said data content over an allocated portion of the bandwidth of said PLC network [Logvinov: paragraph 0009, lines 5-10].

Regarding **Claim 12**. Logvinov teaches a system for providing local area wireless communications, comprising a content server having power-line communication (PLC) network connectivity [paragraph 0023, lines 4-5 & paragraph 0025, lines 4-9 & Fig 1, Item 18 & paragraph 0025, lines 4-9 & Fig 1, Item 12 (inherently, the head end (server) provides broadband communications)]; a device communications module [paragraph 0024, lines 1-5 (signal processing module, data processing module and data synchronization module)]; a PLC interface associated with said device communications module [paragraph 0024, lines 1-2 (PLC receiver)]; said PLC interface configured for communicating data content over said PLC network with said content server [paragraph 0023, lines 4-5]. Logvinov teaches a PLC wireless communication interface associated with said device communications module; said PLC wireless communication interface configured for communicating data content between said PLC interface and a remote device having PLC wireless connectivity. However, Logvinov fails to specifically teach an ultra-wide band (UWB) wireless communication interface associated with said device communications module; said UWB wireless communication interface configured for communicating data content between said PLC interface and a remote device having UWB wireless connectivity. The examiner maintains that the claimed limitation was well known in the art as taught by Santhoff.

In the same field of endeavor Santhoff discloses an ultra-wideband communication system through local power lines including an ultra-wide band (UWB) wireless communication interface [paragraph 0089, lines 17-19 & Fig 6, Item 302 (transceiver)]; said UWB wireless communication interface configured for communicating data content between said PLC interface and a remote device having UWB wireless connectivity [paragraph 0093 & Fig 7, Item 401 (remote device transceiver allows wireless communication)]

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use; the server, device communication module, and PLC interface as taught by Logvinov together with the ultra-wide band interface as taught by Santhoff in order to have a compound system with the capabilities of wired and wireless communication associated with each remote device.

Regarding **Claim 18**. The combination of Logvinov and Santhoff further teaches wherein said content server is configured to operate in a bus master mode when a bus master is not available on said PLC network; further comprising means for allocating bandwidth to devices communicating over said PLC network when said content server operates in said bus master mode [Logvinov: paragraph 0025, lines 1-9 & paragraph 0009, lines 5-10].

Regarding **Claim 21**. The combination of Logvinov and Santhoff further teaches means associated with said device communications module for communicating over said PLC network within an allocated bandwidth [Logvinov: paragraph 0009, lines 5-10 & paragraph 0024, lines 1-5].

3. **Claims 2, 3, 4, 8, 9, 10, 11, 13, 14, 15, 16, 17, 22, 23, 24, and 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Logvinov (U.S. Pub.

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No. 2004/0160990 A1) in view of Santhoff (U. S. Pub. No. 2004/0022304 A1) and further in view of Tomlinson Jr. (U.S. Pub. No. 2003/0100288 A1).

Regarding **Claim 2**. The combination of Logvinov and Santhoff teaches everything as applied above in Claim 1 including the PLC receiver configured to detect data content communicated over the PLC network. However, the combination fails to specifically teach unit addressing associated with commands and/or data content communicated over said PLC network. The examiner maintains that the claimed limitation was well known in the art as taught by Tomlinson Jr.

In the same field of endeavor Tomlinson Jr. discloses a universal PLC radio frequency enhanced bridge wherein said PLC receiver is configured to detect unit addressing associated with commands and/or data content communicated over said PLC network [paragraph 0020, lines 18-22 (TAG identification identifies where the message is received from or transmitted to)].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the combined system of Logvinov and Santhoff together with the TAG identification as taught by Tomlinson Jr. in order to be able to differentiate among the remote devices.

Regarding **Claim 3**. The combination of Logvinov, Santhoff, and Tomlinson Jr. further teaches wherein said PLC receiver is configured to ignore commands when said associated unit addressing is not directed to said PLC receiver [Tomlinson Jr.: paragraph 0022, lines 7-12].

Regarding **Claim 4**. The combination of Logvinov and Santhoff teaches everything as applied above in Claim 1 including data content received by the PLC module over the PLC network. However, the combination fails to specifically teach the apparatus further comprising means for decryption of content data

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received. The examiner maintains that the claimed limitation was well known in the art as taught by Tomlinson Jr.

In the same field of endeavor, Tomlinson Jr. discloses a universal PLC radio frequency enhanced bridge wherein the bridge comprises means for decryption of content data received [paragraph 0021, lines 1-8 & Fig 2, Items 140, 112, and 118].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the system of Logvinov and Santhoff together with the bridge of Tomlinson Jr. in order to have functions of encrypting and decrypting data content.

Regarding **Claim 8**. The combination of Logvinov and Santhoff teaches everything as applied above in Claim 7. However, the combination fails to specifically teach wherein said means for communicating said data content over an allocated portion of said power-line bandwidth, comprises: a computer processor; and programming executable by said computer processor for carrying out the operations of registering a bandwidth allocation from a bus master which is connected to said PLC network, and limiting the transmitting and receiving of said content data to said bandwidth allocation. The examiner maintains that the claimed limitation was well known in the art as taught by Tomlinson Jr.

In the same field of endeavor, Tomlinson Jr. discloses a universal PLC radio frequency enhanced bridge wherein: a computer processor [paragraph: 0010, lines 7-9 (microprocessor)]; and programming executable by said computer processor for carrying out the operations of registering a bandwidth allocation from a bus master which is connected to said PLC network, and limiting the transmitting and receiving of said content data to said bandwidth allocation [paragraph 0011 (controller operates as a bus master and, inherently, the controller will execute programmable instruction to carry out specific instructions)].



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Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the system of Logvinov and Santhoff together with the bridge of Tomlinson Jr. in order to have a system that can dynamically determine and adjust bandwidths for remote devices.

Regarding **Claim 9**. The combination of Logvinov, Santhoff, and Tomlinson Jr. further teaches wherein said bandwidth allocation is received from a content server connected to said PLC network and operating in a bus master mode to communicate bandwidth assignments to said PLC module [Logvinov: paragraph 0009, lines 5-10 (head end (server) controls the bandwidth allocation to remote devices through PLC module) & paragraph 0024, lines 1-5 & Fig 1, Item 26].

Regarding **Claim 10**. The combination of Logvinov, Santhoff, and Tomlinson Jr. further teaches wherein said bandwidth assignments are determined in response to bandwidth requests generated by said PLC module [Logvinov: paragraph 0012 & paragraph 0013, lines 1-13 & Fig 1, Item 26 (all modules reside in the head-end which controls all signal transmission)]

Regarding **Claim 11**. The combination of Logvinov, Santhoff, and Tomlinson Jr. further teaches wherein said bandwidth assignments comprise time slots [Logvinov: paragraph 0009, lines 5-10 & paragraph 0010, lines 1-11].

Regarding **Claim 13**. The combination of Logvinov and Santhoff teaches everything as applied above in Claim 12. However, the combination fails to specifically teach wherein said content server and said device communications modules include means for unit addressing of said device communications modules within said PLC network. The examiner maintains that the claimed limitation was well known in the art as taught by Tomlinson Jr.

In the same field of endeavor Tomlinson Jr. discloses a universal PLC radio frequency enhanced bridge wherein said content server and said device

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communications modules include means for unit addressing of said device communications modules within said PLC network [paragraph 0020, lines 18-22 (the TAG identification identifies where the message is received from or transmitted to, which would inherently be known by the server and device communication module)].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the combined system of Logvinov and Santhoff together with the TAG identification as taught by Tomlinson Jr. in order to be able to differentiate among the remote devices.

Regarding **Claim 14**. The combination of Logvinov, Santhoff, and Tomlinson Jr. further teaches wherein said unit addressing comprises unit address information for a destination unit or unit address information from a source unit [Tomlinson Jr.: paragraph 0020, lines 18-22 (TAG identification identifies where the message is received from or transmitted to)].

Regarding **Claim 15**. The combination of Logvinov, Santhoff, and Tomlinson Jr. further teaches wherein said means for unit addressing is configured to enable communication within a specific portion of the bandwidth allocated to a given device communication module [Tomlinson Jr.: paragraph 0020 & Fig 3 (the TAG identification is only part of the message transmitted and therefore enables communication within a specific portion of the bandwidth allocated)]

Regarding **Claim 16**. The combination of Logvinov and Santhoff teaches everything as applied above in Claim 12. However, the combination fails to specifically teach wherein said content server is configured for recording content received over said PLC network. The examiner maintains that the claimed limitation was well known in the art as taught by Tomlinson Jr.

In the same field of endeavor, Tomlinson Jr. discloses a universal PLC radio frequency enhanced bridge wherein said content server is configured for

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recording content received over said PLC network [paragraph 0010, lines 1-4 (memory unit)].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, within the system of Logvinov and Santhoff, the bridge of Tomlinson Jr. in order to have a compound system capable of recording received content.

Regarding **Claim 17**. The combination of Logvinov and Santhoff teaches everything as applied above in Claim 12. However, the combination fails to specifically teach wherein said content server is configured for transmitting content played from a storage media over said PLC network. The examiner maintains that the claimed limitation was well known in the art as taught by Tomlinson Jr.

In the same field of endeavor, Tomlinson Jr. discloses a universal PLC radio frequency enhanced bridge wherein said content server is configured for transmitting content played from a storage media over said PLC network [paragraph 0011, lines 14-25 (messages stored in RAM memory are communicated via controller over PLC network)].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, within the system of Logvinov and Santhoff, the bridge of Tomlinson Jr. in order to have a compound system capable of transmitting content played from a storage media.

Regarding **Claim 22**. The combination of Logvinov and Santhoff teaches everything as applied above in Claim 21. However, the combination fails to specifically teach wherein said means for communicating within said allocated bandwidth comprises an allocation control circuit associated with said device communications module which is configured to communicate data content only within bandwidth portions allocated by a bus master configured for allocating bandwidth portions to said device communications module. The examiner

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maintains that the claimed limitation was well known in the art as taught by Tomlinson Jr.

In the same field of endeavor, Tomlinson Jr. discloses a universal PLC radio frequency enhanced bridge wherein said means for communicating within said allocated bandwidth comprises an allocation control circuit associated with said device communications module which is configured to communicate data content only within bandwidth portions allocated by a bus master configured for allocating bandwidth portions to said device communications module [paragraph 0011, lines 14-19 (controller controls the transfer of the predetermined format messages or signal transmission and would inherently include device communication module all controlled by the PC modem)].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the system of Logvinov and Santhoff together with the bridge of Tomlinson Jr. in order to have a compound system that does not waste bandwidth.

Regarding **Claim 23**. The combination of Logvinov, Santhoff and Tomlinson Jr. further teaches wherein said allocation control circuit is configured to request bandwidth from said bus master; and wherein said allocation control circuit is configured to utilize bandwidth portions for communicating data streams as dictated by said bus master [Tomlinson Jr.: paragraph 0011, lines 14-25 (PLC modem acts as the bus master providing the format message and inherently the bandwidth to the controller)].

Regarding **Claim 24**. The combination of Logvinov, Santhoff and Tomlinson Jr. further teaches wherein said bandwidth request from said allocation control circuit is transmitted to said bus master prior to said device communications module transmitting data content over said PLC network [Tomlinson Jr.: paragraph 0011, lines 14-25 (controller inherently comprises the device communication module but is controlled by the modem)].

Regarding **Claim 25**. The combination of Logvinov and Santhoff teaches everything as applied above in Claim 12. However, the combination fails to specifically teach wherein said PLC interface is configured for encrypting data content transmitted over said PLC network and decrypting data content received over said PLC network. The examiner maintains that the claimed limitation was well known in the art as taught by Tomlinson Jr.

In the same field of endeavor, Tomlinson Jr. discloses a universal PLC radio frequency enhanced bridge wherein said PLC interface is configured for encrypting data content transmitted over said PLC network and decrypting data content received over said PLC network [paragraph 0021, lines 1-8 & Fig 2, Items 140, 112, and 118].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the combined system of Logvinov and Santhoff together with the bridge of Tomlinson Jr. in order to have a system capable of encrypting and decrypting data transmissions.

4. **Claims 26, 27, 28, and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Logvinov (U.S. Pub. No. 2004/0160990 A1) in view of Logvinov (U.S. Pub. No. 2005/0089061 A1).

Regarding **Claim 26**. Logvinov (U.S. Pub. No. 2005/0089061 A1) teaches a method of communicating data content streams between a content server and a remote wireless device, comprising: connecting a power-line communications (PLC) to ultra-wide band (UWB) wireless communications module to a PLC network [paragraph 0020, lines 1-6 & paragraph 0023, lines 24-36 (transmitting and receiving devices) & paragraph 0024, lines 5-8 (inherently, a server must exist to support both networks)]; said module configured to convert data content streams received from a UWB wireless remote device to a data content stream

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on said PLC network [paragraph 0020, lines 17-27 & paragraph 0024, lines 5-8 (inherently, the hybrid system must be able to convert data content from a UWB wireless type to PLC type to support both systems)]; said module further configured to convert data content streams received from a content server over said PLC network to a UWB transmission to a UWB wireless remote device [paragraph 0020, lines 17-27 & paragraph 0024, lines 5-8 (inherently, the hybrid system must be able to convert data from PLC type to UWB wireless type to support both systems)]; (c) communicating said data content stream between said content server and said remote wireless device with the data content being converted within said PLC to UWB wireless communications module [paragraph 0020, lines 17-27 & paragraph 0024, lines 5-8 (inherently, the hybrid system must be able to convert data from PLC signals to UWB signals and vice versa to support both systems)]. However, Logvinov (U.S. Pub. No. 2005/0089061 A1) fails to specifically teach allocating bandwidth upon said PLC network connected between said content server and said PLC to UWB wireless communications module within which said data content streams are to be transmitted. The examiner maintains that the claimed limitation was well known in the art as taught by Logvinov (U.S. Pub. No. 2004/0160990 A1).

In the same field of endeavor, Logvinov (U.S. Pub. No. 2004/0160990 A1) discloses a method for timing controlled signal transmission in a point to multipoint power line communication system where the timing controlled signal selects allocating bandwidth upon said PLC network connected between said content server and said PLC to UWB wireless communications module within which said data content streams are to be transmitted [paragraph 0009].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, the method of Logvinov (U.S. Pub. No. 2005/0089061 A1), together with the timing controlled signal of Logvinov (U.S. Pub. No. 2004/0160990 A1) in order to have a compound system capable of allocating bandwidth as needed to remote devices.

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Regarding **Claim 27**. The combination of Logvinov (U.S. Pub. No. 2004/0160990 A1) and Logvinov (U.S. Pub. No. 2005/0089061 A1) further teaches wherein said allocating of bandwidth comprises assigning time slots for the communication of said data content streams [Logvinov (U.S. Pub. No. 2004/0160990 A1): paragraph 0009, lines 5-10 & paragraph 0010, lines 1-11].

Regarding **Claim 28**. The combination of Logvinov (U.S. Pub. No. 2004/0160990 A1) and Logvinov (U.S. Pub. No. 2005/0089061 A1) further teaches wherein said allocating of bandwidth is performed by a content server operating as a bus master for the physical PLC network and allocating bandwidth for the transmission of data content within the virtual networks of said physical PLC network [Logvinov (U.S. Pub. No. 2004/0160990 A1): paragraph 0009, lines 5-10 & paragraph 0012].

Regarding **Claim 30**. The combination of Logvinov (U.S. Pub. No. 2004/0160990 A1) and Logvinov (U.S. Pub. No. 2005/0089061 A1) further teaches wherein said bus master allocates bandwidth to said PLC to UWB communications module prior to transmitting a content stream to said module [Logvinov (U.S. Pub. No. 2004/0160990 A1): paragraph 0009, lines 5-10 (inherently bandwidth must be allocated before transmission)].

5. **Claims 29 and 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Logvinov (U.S. Pub. No. 2004/0160990 A1) in view of Logvinov (U.S. Pub. No. 2005/0089061 A1) and further in view of Tomlinson Jr. (U.S. Pub. No. 2003/0100288 A1).

Regarding **Claim 29**. The combination of Logvinov (U.S. Pub. No. 2004/0160990 A1) and Logvinov (U.S. Pub. No. 2005/0089061 A1) teaches everything as applied above in Claim 28. However, the combination fails to specifically teach

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wherein said PLC to UWB wireless communications module requests bandwidth from said bus master prior to transmitting a content stream received from said remote UWB wireless device over said PLC network. The examiner maintains that the claimed limitation was well known in the art as taught by Tomlinson Jr.

In the same field of endeavor, Tomlinson Jr. discloses a universal PLC radio frequency enhanced bridge wherein said PLC to UWB wireless communications module requests bandwidth from said bus master prior to transmitting a content stream received from said remote UWB wireless device over said PLC network [paragraph 0011, lines 19-23].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the method of Logvinov (U.S. Pub. No. 2005/0089061 A1) and timing controlled signal of Logvinov (U.S. Pub. No. 2004/0160990 A1) together with the bridge of Tomlinson Jr. in order to have bandwidth control from the bus master.

Regarding **Claim 31**. The combination of Logvinov (U.S. Pub. No. 2004/0160990 A1) and Logvinov (U.S. Pub. No. 2005/0089061 A1) teaches everything as applied above in Claim 26 including transmissions over the PLC network. However, the combination fails to specifically teach encrypting transmissions. The examiner maintains that the claimed limitation was well known in the art as taught by Tomlinson Jr.

In the same field of endeavor, Tomlinson Jr. discloses a universal PLC radio frequency enhanced bridge wherein the bridge comprises means for encrypting transmission [paragraph 0021, lines 1-8 & Fig 2, Items 140, 112, and 118].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the method of Logvinov (U.S. Pub. No. 2005/0089061 A1) and timing controlled signal of Logvinov (U.S. Pub. No. 2004/0160990 A1) together with the bridge of Tomlinson Jr. in order to have



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functions of encrypting and decrypting transmissions.

### ***Allowable Subject Matter***

6. **Claims 19 –20** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larry Hannif-Ali whose telephone number is 571-272-5598. The examiner can normally be reached on Mon-Fri 9:00AM - 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/651,684

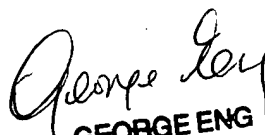
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A handwritten signature in cursive script, appearing to read "Larry Hannif-Ali".

Larry Hannif-Ali

October 20, 2005

A handwritten signature in cursive script, appearing to read "George Eng".  
**GEORGE ENG**  
**PRIMARY EXAMINER**